Amendments to the Claims:

Claim 1. (Currently Amended) A method for identifying a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition, said method comprising:

(a) providing a *C. elegans* or isolated *C. elegans* cell expressing a ~~gene~~ nucleic acid sequence that encodes a mammalian polypeptide having at least 95% identity to SEQ ID NO:54 and that functions in insulin signaling; and

(b) contacting said *C. elegans* or isolated *C. elegans* cell with a candidate compound, wherein a decrease in expression or activity of said ~~gene~~ nucleic acid sequence following contact of said *C. elegans*, or said isolated *C. elegans* cell with said candidate compound identifies a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition.

Claims 2-12 (Canceled).

Claim 13. (Currently Amended) The method of claim 1, wherein said ~~gene~~ nucleic acid sequence is a human ~~gene~~ nucleic acid sequence.

Claims 14-16 (Canceled).

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Claim 17. (Currently Amended) A method for identifying a candidate modulatory

compound for ameliorating or delaying an impaired glucose tolerance condition, said

method comprising:

(a) providing a *C. elegans* or isolated *C. elegans* cell expressing a ~~gene~~ <u>nucleic</u>

<u>acid sequence</u> that hybridizes under highly stringent conditions to the complement of a

nucleic acid sequence encoding the sequence of SEQ ID NO:57 or SEQ ID NO:102 and

that functions in insulin signaling;

(b) contacting said *C. elegans* or isolated *C. elegans* cell with a candidate

compound, wherein a decrease in expression or activity of said ~~gene~~ <u>nucleic acid</u>

<u>sequence</u> following contact of said *C. elegans* or said isolated *C. elegans* cell with said

candidate compound identifies a candidate modulatory compound for ameliorating or

delaying an impaired glucose tolerance condition.

Claim 18 (Canceled).

Claim 19. (Currently Amended) The method of claim 17, wherein said ~~gene~~

<u>nucleic acid sequence</u> is AFX

Claim 20. (Currently Amended) The method of claim 17, wherein said ~~gene~~

<u>nucleic acid sequence</u> is FKHR.

Claim 21. (Currently Amended) A method for identifying a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition, said method comprising:

(a) providing a *C. elegans* or isolated *C. elegans* cell expressing a <u>nucleic acid sequence encoding</u> human FKHR ~~gene~~ <u>polypeptide</u>; and

(b) contacting said *C. elegans* or isolated *C. elegans* cell with a candidate compound, wherein a decrease in expression or activity of said <u>nucleic acid sequence encoding human</u> FKHR ~~gene~~ <u>polypeptide</u> following contact of said *C. elegans* or isolated *C. elegans* cell with said candidate compound identifies a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition.

Claim 22. (Currently Amended) A method for identifying a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition, said method comprising:

(a) providing a *C. elegans* or isolated *C. elegans* cell expressing a <u>nucleic acid sequence encoding</u> human AFX ~~gene~~ <u>polypeptide</u>; and

(b) contacting said *C. elegans* or isolated *C. elegans* cell with a candidate compound, wherein a decrease in expression or activity of said <u>nucleic acid sequence encoding human</u> AFX ~~gene~~ <u>polypeptide</u> following contact of said *C. elegans* or isolated *C. elegans* cell with said candidate compound identifies a candidate modulatory

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compound for ameliorating or delaying an impaired glucose tolerance condition.

Claim 23. (Previously Presented) The method of any one of claims 1, 17, 21, and 22, wherein said glucose tolerance condition is atherosclerosis.

Claim 24. (Previously Presented) The method of any one of claims 1, 17, 21, and 22, wherein said glucose tolerance condition is obesity.